

120W Brake Motor 120W(□ 90mm)

Motor 사양

Model 9BDG*-120F(-T): Gear Type Shaft 9BDD*-120F(-T): D-Cut Type Shaft 9BDK*-120F(-T): Key Type Shaft	Output W	Voltage V	Frequency Hz	Poles	Duty	Starting Torque kgfcm N.m	Rated Load			Capacitor μF / VAC
							Speed r/min	Current A	Torque kgfcm N.m	
Lead Wire Type										
9BDG1(A)-120F □	120	1φ 110	60	4	30min.	7.11 0.711	1550	2.50	7.54 0.754	30.0 / 250
9BDG2(D)-120F □	120	1φ 220	60	4	30min.	6.42 0.642	1600	1.08	7.31 0.731	6.5 / 450
9BDGE-120F □	120	1φ 220	50	4	30min.	6.28 0.628	1250	1.10	9.35 0.935	6.5 / 450
		1φ 240				7.50 0.750		1.21	9.35 0.935	
9BDG3(G)-120F □	120	3φ 220	50	4	Cont.	24.40 2.440	1300	0.88	8.99 0.899	-
			60			20.00 2.000		1600	0.71	
		3φ 230	50	4	Cont.	27.00 2.700	1350	0.86	8.66 0.866	
			60			21.70 2.170		1600	0.76	
9BDG4(K)-120F □	120	3φ 380	50	4	Cont.	24.30 2.430	1300	0.50	8.99 0.899	-
			60			19.90 1.990		1600	0.41	
		3φ 400	50	4	Cont.	27.10 2.710	1350	0.49	8.66 0.866	
			60			21.90 2.190		1600	0.43	
9BDG5(L)-120F □	120	3φ 415	50	4	Cont.	24.30 2.430	1300	0.47	8.99 0.899	-
			60			19.90 1.990		1600	0.37	
		3φ 440	50	4	Cont.	27.50 2.750	1350	0.47	8.66 0.866	
			60			22.20 2.220		1600	0.40	

- 1) 모터 모델명 * 자리에는 전압코드가, □ 안에는 부착되는 감속기의 모델 타입명이 들어갑니다. 2) 전압코드 A, D, E, G, K, L은 TP(Thermal Protector) 부착 사양입니다.
- 3) Gear Type Shaft는 감속기 부착용이며 D-Cut Type Shaft는 모터 단독 사용시의 출력축입니다.
- 4) 상상 380V~440V 모터에서는 인버터 사용을 할 수 없습니다. 인버터 사용시 권선의 절연이 열화되어 모터가 파손될 수 있습니다.

감속기 부착 시 최대허용토크

60Hz

Motor Model	Gearbox Model	감속비 r/min	2	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	
9BDG*-120FP	9PBK □ BH	kgfcm	11.8	17.8	21.3	29.6	35.5	44.4	53.3	59.2	66.7	80.0	96.0	106.7	120.5	144.6	173.6	192.9	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
	9PFK □ BH	N.m	1.16	1.74	2.09	2.90	3.48	4.35	5.22	5.80	6.53	7.84	9.41	10.45	11.81	14.17	17.01	18.90	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	
9BDG*-120FH	9HBK □ BH	kgfcm	-	17.8	21.3	29.6	35.5	44.4	53.3	59.2	66.7	80.0	96.0	106.7	120.5	144.6	173.6	192.9	241.1	269.3	300.0	300.0	300.0	300.0	300.0	300.0	300.0	
	9HFK □ BH	N.m	-	1.74	2.09	2.90	3.48	4.35	5.22	5.80	6.53	7.84	9.41	10.45	11.81	14.17	17.01	18.90	23.62	28.35	29.40	29.40	29.40	29.40	29.40	29.40	29.40	

Motor Model	Gearbox Model	감속비 r/min	10	12	15	18	25	30	36	50	60	Motor Model	Gearbox Model	감속비 r/min	5	7.5	10	15	20	25	30	40	50	60	80
9BDG*-120FW	9WD □ BL/□ BR/□ BRL	kgfcm	59.9	70.1	84.4	97.3	127.8	144.6	153.1	142.9	122.4	9BDG*-120FWH	9WHD □ -030	kgfcm	25.4	36.8	47.3	66.6	84.2	96.4	112.2	137.9	157.8	163.3	132.7
		N.m	5.87	6.87	8.27	9.54	12.53	14.17	15.00	14.00	12.00			N.m	2.49	3.61	4.64	6.53	8.25	9.45	11.00	13.52	15.46	16.00	13.00

Motor Model	Gearbox Model	감속비 r/min	15	20	25	30	40	50	60	80	100	120	160	200	225	240
9BDG*-120FHC	9HC □ □	kgfcm	80	107	133	160	213	267	320	427	533	640	853	1067	1200	1280
		N.m	7.84	10.5	13	15.7	20.9	26.2	31.4	41.8	52.2	62.7	83.6	105	118	125

50Hz

Motor Model	Gearbox Model	감속비 r/min	2	3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200
9BDG*-120FP	9PBK □ BH	kgfcm	14.0	21.0	25.2	35.1	42.1	52.6	63.1	70.1	79.0	94.8	113.8	126.4	142.9	171.4	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
	9PFK □ BH	N.m	1.37	2.06	2.47	3.44	4.12	5.15	6.19	6.87	7.74	9.29	11.15	12.39	14.00	16.80	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	
9BDG*-120FH	9HBK □ BH	kgfcm	-	21.0	25.2	35.1	42.1	52.6	63.1	70.1	79.0	94.8	113.8	126.4	142.9	171.4	205.7	228.6	285.7	300.0	300.0	300.0	300.0	300.0	300.0	300.0	
	9HFK □ BH	N.m	-	2.06	2.47	3.44	4.12	5.15	6.19	6.87	7.74	9.29	11.15	12.39	14.00	16.80	20.16	22.40	28.00	29.40	29.40	29.40	29.40	29.40	29.40	29.40	

Motor Model	Gearbox Model	감속비 r/min	10	12	15	18	25	30	36	50	60	Motor Model	Gearbox Model	감속비 r/min	5	7.5	10	15	20	25	30	40	50	60	80
9BDG*-120FHC	9WD □ BL/□ BR/□ BRL	kgfcm	71.0	83.1	100.0	115.3	151.5	170.0	153.1	142.9	122.4	9BDG*-120FWH	9WHD □ -030	kgfcm	30.1	43.6	56.1	79.0	99.7	114.3	133.0	163.5	173.5	163.3	132.7
		N.m	6.96	8.15	9.80	11.30	14.85	16.66	15.00	14.00	12.00			N.m	2.95	4.28	5.50	7.74	9.77	11.20	13.03	16.02	17.00	16.00	13.00

Motor Model	Gearbox Model	감속비 r/min	15	20	25	30	40	50	60	80	100	120	160	200	225	240
9BDG*-120FHC	9HC □ □	kgfcm	94.8	126	158	190	253	316	379	506	632	758	1011	1264	1422	1517
		N.m	9.29	12.3	15.5	18.6	24.8	31	37.1	49.6	61.9	74.3	99.1	124	139	149

- 1) 모터 모델명 □ 안에는 전압코드가 들어갑니다. 2) 감속기 모델명 □ 안에는 감속비가 들어갑니다.
- 3) 위의 표에서 색칠된 범위의 감속비를 선택했을 때 감속기의 출력축은 모터의 출력축과 같은 방향으로 회전합니다. 흰색 바탕 범위의 감속비에서는 감속기 출력축은 모터 출력축의 회전방향과 반대방향으로 회전합니다.
- 4) 회전속도(r/min)는 모터의 동기회전속도(50Hz:1500r/min, 60Hz:1800r/min)를 감속비로 나누어 계산합니다. 실제 회전속도는 부하의 크기에 따라 표시보다 2~20% 정도 느립니다.

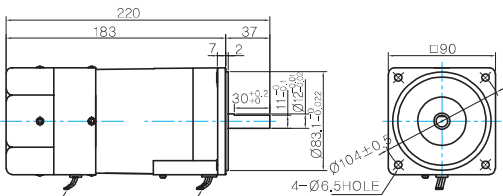
B AC Motors

Brake Motor 120W (□ 90mm)

Dimensions

MOTOR ONLY





- MOTOR MODEL:
9BDD□-120F (GENERAL FAN)



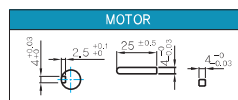
LEAD WIRE(Yellow) 300mm
UL STYLE NQ,3398 AWG NQ,22
380V OVER NQ,3613 AWG NQ,22

LEAD WIRE 300mm
UL STYLE NQ,3271 AWG NQ,20

MOTOR OUTPUT SHAFT

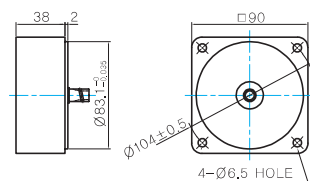
MODEL	SPEC
D-CUT TYPE	
9BDD□-120F	
KEY TYPE	
9BDK□-120F	

KEY SPEC



중간감속기

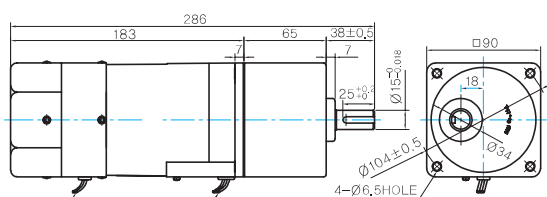
- MODEL:
9XD10□□



GEARED MOTOR

P TYPE GEARBOX

- MOTOR MODEL:
9BDG□-120FP (GENERAL FAN)



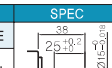

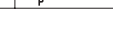
LEAD WIRE(Yellow) 300mm
UL STYLE NQ,3398 AWG NQ,22
380V OVER NQ,3613 AWG NQ,22

LEAD WIRE 300mm
UL STYLE NQ,3271 AWG NQ,20

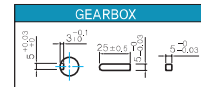
- GEARBOX MODEL:
9PBK□BH

- GEARBOX MODEL:
9PFK□BH

GEARBOX OUTPUT SHAFT

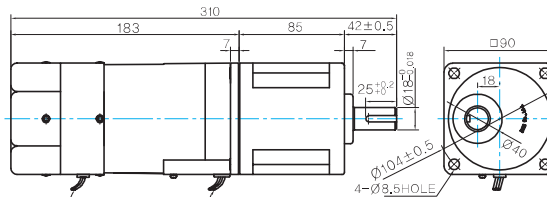
MODEL	SPEC
KEY TYPE	
9PBK□BH	
9PFK□BH	

KEY SPEC



H TYPE GEARHEAD

- MOTOR MODEL:
9BDG□-120FH (GENERAL FAN)






LEAD WIRE(Yellow) 300mm
UL STYLE NQ,3398 AWG NQ,22
380V OVER NQ,3613 AWG NQ,22

LEAD WIRE 300mm
UL STYLE NQ,3271 AWG NQ,20

- GEARBOX MODEL:
9HBK□BH

- GEARBOX MODEL:
9HFK□BH

GEARBOX OUTPUT SHAFT

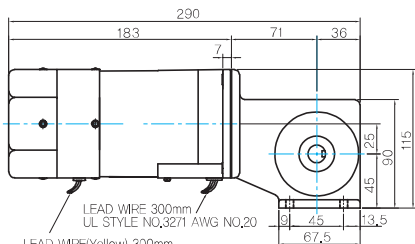
MODEL	SPEC
KEY TYPE	
9HBK□BH	
9HFK□BH	

KEY SPEC



W TYPE GEARBOX

- MOTOR MODEL:
9BDG□-120FW (GENERAL FAN)

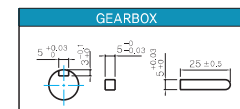


LEAD WIRE 300mm
UL STYLE NQ,3271 AWG NQ,20

LEAD WIRE(Yellow) 300mm
UL STYLE NQ,3398 AWG NQ,22
380V OVER NQ,3613 AWG NQ,22

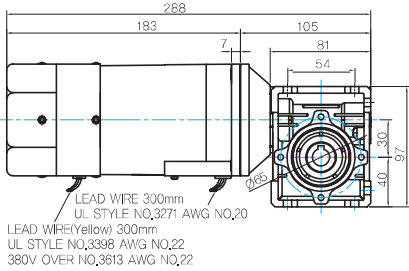
- GEARBOX MODEL:
9WD□BL/BR/BRL

KEY SPEC

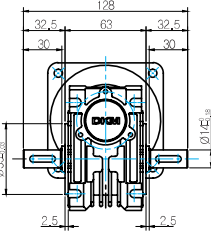


WH TYPE GEARBOX

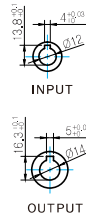
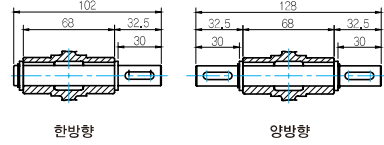
- MOTOR MODEL:
9BDG□-120FWH (GENERAL FAN)



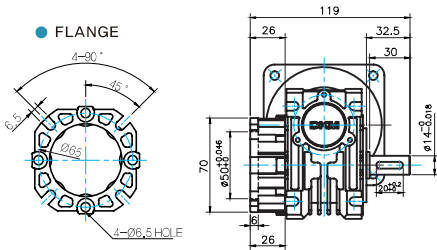
- GEARBOX MODEL:
9WHD□-030



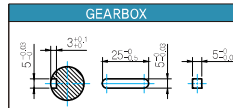
- SHAFT



- FLANGE

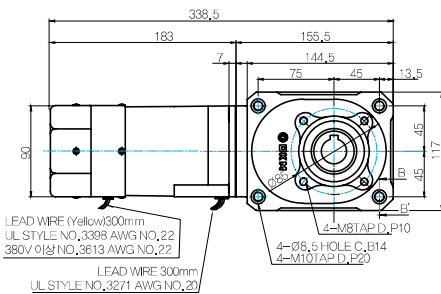


- KEY SPEC

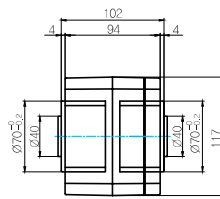


HC TYPE GEARBOX

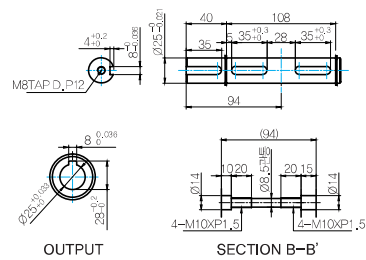
- MOTOR MODEL :
9BDG□-120FHC (GENERAL FAN)



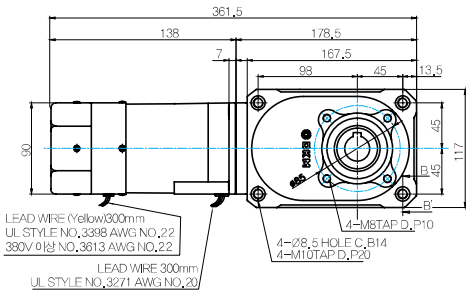
- GEARBOX MODEL :
9HC(15 ~ 60) □



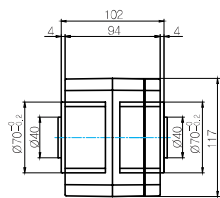
- SHAFT



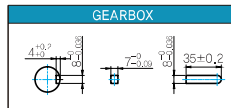
- MOTOR MODEL :
9BDG□-120FHC (GENERAL FAN)



- GEARBOX MODEL :
9HC(80 ~ 240) □



- KEY SPEC



WEIGHT

	PART	WEIGHT(Kg)
GEAR BOX	MOTOR	3,05
	9PB(F)K2BH - 9PB(F)K10BH	1,28
	9PB(F)K12.5BH - 9PB(F)K20BH	1,3
	9PB(F)K25BH - 9PB(F)K60BH	1,45
	9PB(F)K75BH - 9PB(F)K200BH	1,47
	9HB(F)K3BH - 9HB(F)K10BH	1,62
	9HB(F)K12.5BH - 9HB(F)K20BH	1,68
	9HB(F)K25BH - 9HB(F)K60BH	1,73
	9HB(F)K75BH - 9HB(F)K200BH	1,78
	9WD □BL/BR/BRL	1,0
	9WHD□-030	1,2
9HC15□	4,05	
9HC20□~9HC60□	4,1	
9HC80□~9HC240□	4,75	
9XD10□□	0,6	

* 출력 FLANGE와 SHAFT는 별매입니다.

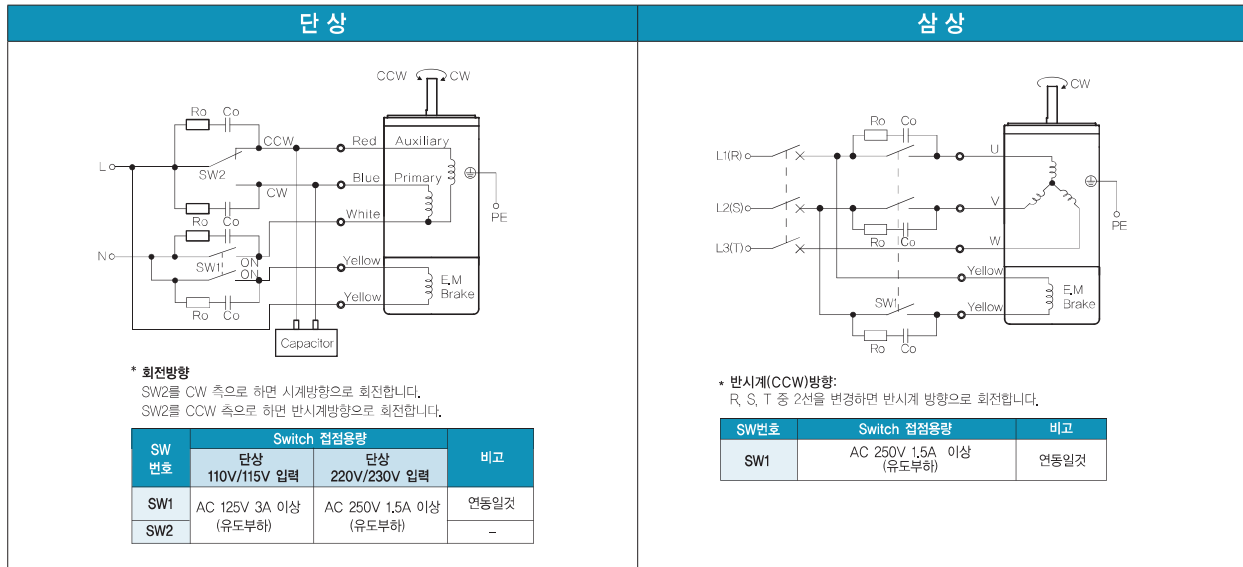
B AC Motors

Brake Motor 120W (□ 90mm)

Motor Images



결선도



- 회전방향은 모터 축 측에서 본 방향을 나타냅니다.
- CW는 시계방향, CCW는 반시계방향입니다.
- SW1은 모터의 운전/정지와 전자브레이크 조작용입니다. (연동)
- SW1을 ON으로 하면 브레이크는 해제되고 모터가 회전하며, OFF로 할 경우 모터는 정지하며 브레이크가 작동합니다.
- 모터가 정지한 상태에서 브레이크를 해제할 때에는 SW1을 비연동으로 하고 노란색 리드선 축 스위치만 ON으로 합니다.
- Ro, Co는 Surge 전압 흡수용 CR회로입니다. [Ro=5~200Ω, Co=0.1~0.2μF, 200WV (400VW)]